

CHAPTER 1

INTRODUCTION

1.1 Background

Bluetooth is a device used to receive and transmit data. Bluetooth is an industrial specification for wireless personal area networks (PANs). It provides a way to connect and exchange information between devices such as mobile phones, laptops, personal computers, printers, digital cameras, and video game consoles over a secure, globally unlicensed short-range radio frequency. [2] In an infrared system, text message can only be sent if the module is placed side by side. In a Bluetooth system, text message can be sent from 100meter range the most. [8] Bluetooth can be replaced as an alternative to infrared. Therefore text message transmission via Bluetooth is reluctant.

1.2 Objectives

The objectives of this project are to:

- i. To develop a message display system via Bluetooth.
- ii. To develop the interfacing of microcontroller with a Bluetooth module and graphic LCD screen using PBASIC programming.

1.3 Project Scopes

This project concentrates on the development of the programming in PBASIC to transmit the data on a LCD screen via Bluetooth.

1.4 Methodology

Methodology or the work flow of the project basically gives a view on the flow of the overall project that have been carried out which involves the hardware design and the software integration of the project. Then the system is being tested to produce a result at the end of the project. The result that is being produced is analyzed to be compatible the proposed system earlier. This project in short is separated into three parts which is:

- Hardware Design
- Software Development
- Integration Between Hardware and Software

For the three parts that have been divided literature had been done at the first place. Once literature review is completed the hardware is designed and tested. Once the hardware testing is success then the software development was done. Finally both the hardware design and the software development is done to complete the project.

1.5 Thesis Overview

This thesis is combination of 5 chapters that contain the Introduction, Literature Review, Hardware Design, Software Design, Result and Discussion, and the last chapter is a Conclusion and further development of the system

Chapter 1 is an introduction of the project. In this chapter, we explain about background, objectives, scope of the project and the methodology. The concept of the project and the overall overview of the project also will also being discussed in this chapter.

Chapter 2 focuses on the literature review for the development and implementation of the overall project. It gives a brief review of the project being conducted so far in terms of the major devices used itself. Rather than that in this chapter we are going explain about the Bluetooth protocols that have being used in order to interface between the graphic LCD screen and PIC.

Chapter 3 is mainly on the Hardware Design and software design of the system of the overall system. In this chapter we are going to explain briefly of the hardware design for the interfacing of the Bluetooth Module, PIC and Graphic LCD screen. These are the three main devices being used in the project. The software design is mainly on the Bluetooth Module and the Graphic LCD screen.

Chapter 4 is the result and discussion. In this chapter the overall result of the project about the Bluetooth Message LCD Display project will be produced as evidence that the project is success in the end.